

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

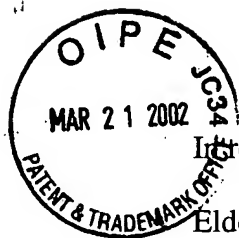
Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

3763



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

TO

MAR 26 2002

RECEIVED

TO 3100 MAIL ROOM

In re patent application of:

Eldon H. Nyhart, Jr.

Serial No. 10/039,797

Filed: October 26, 2001

APPARATUS FOR THE CONTROLLABLE  
MODIFICATION OF COMPOUND  
CONCENTRATION IN A TUBE

Before the Examiner

March 7, 2002

#3

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents  
Washington, DC 20231

Sir:

Pursuant to the duty of disclosure embodied in 37 C.F.R. § 1.56, Applicant wishes to bring to the attention of the Examiner the following patents, publications and/or other information:

1. U.S. Patent No. 2,883,986 to De Luca et al. issued April 1959.
2. U.S. Patent No. 3,435,826 to Fogarty issued April 1969.
3. U.S. Patent No. 3,467,101 to Fogarty et al. issued September 1969.
4. U.S. Patent No. 3,570,476 to Gregg issued March 1971.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Honorable Commissioner for Patents, Washington, D.C. 20231 on March 7, 2002.

John V. Daniluck  
Name of Registered Representative

Signature

7 March 2002

~~February 23, 2002~~  
Date of Signature

5. U.S. Patent No. 3,901,829 to Slingluff et al. issued August 1975.
6. U.S. Patent No. 4,062,746 to Rich et al. issued December 1977.
7. U.S. Patent No. 4,156,066 to Gould issued May 1979.
8. U.S. Patent No. 4,156,067 to Gould issued May 1979.
9. U.S. Patent No. 4,195,637 to Gruntzig et al. issued April 1980.
10. U.S. Patent No. 4,271,839 to Fogarty et al. issued June 1981.
11. U.S. Patent No. 4,289,128 to Rusch issued September 1981.
12. U.S. Patent No. 4,323,071 to Simpson et al. issued April 1982.
13. U.S. Patent No. 4,359,453 to Gordon issued November 1982.
14. U.S. Patent No. 4,479,497 to Fogarty et al. issued October 1984.
15. U.S. Patent No. 4,531,943 to Van Tassel et al. issued July 1985.
16. U.S. Patent No. 4,545,390 to Leary issued October 1985.
17. U.S. Patent No. 4,554,929 to Samson et al. issued November 1985.
18. U.S. Patent No. 4,571,240 to Samson et al. issued February 1986.
19. U.S. Patent No. 4,573,966 to Weikl et al. issued March 1986.
20. U.S. Patent No. 4,581,017 to Sahota issued April 1986.
21. U.S. Patent No. 4,582,181 to Samson issued April 1986.
22. U.S. Patent No. 4,597,755 to Samson et al. issued July 1986.
23. U.S. Patent No. 4,610,241 to Gordon issued September 1986.
24. U.S. Patent No. 4,616,648 to Simpson issued October 1986.
25. U.S. Patent No. 4,702,252 to Brooks et al. issued October 1987.
26. U.S. Patent No. 4,743,673 to Johnston et al. issued May 1988.

27. U.S. Patent No. 4,748,982 to Horzewski et al. issued June 1988.
28. U.S. Patent No. 4,762,129 to Bonzel issued August 1988.
29. U.S. Patent No. 4,771,130 to Cohen issued September 1988.
30. U.S. Patent No. 4,799,479 to Spears issued January 1989.
31. U.S. Patent No. 4,807,620 to Strul et al. issued February 1989.
32. U.S. Patent No. 4,824,436 to Wolinsky issued April 1989.
33. U.S. Patent No. 4,835,258 to Hollenberg et al. issued May 1989.
34. U.S. Patent No. 4,846,171 to Kauphusman et al. issued July 1989.
35. U.S. Patent No. 4,878,492 to Sinofsky et al. issued November 1989.
36. U.S. Patent No. 4,895,560 to Papantonakos issued January 1990.
37. U.S. Patent No. 4,940,055 to Brown issued July 1990.
38. U.S. Patent No. 4,957,481 to Gatenby issued September 1990.
39. U.S. Patent No. 4,976,690 to Solar et al. issued December 1990.
40. U.S. Patent No. 4,994,033 to Shockey et al. issued February 1991.
41. U.S. Patent No. 4,977,431 to Isner et al. issued March 1991.
42. U.S. Patent No. 5,002,531 to Bonzel issued March 1991.
43. U.S. Patent No. 5,009,659 to Hamlin et al. issued April 1991.
44. U.S. Patent No. 5,026,367 to Leckrone et al. issued June 1991.
45. U.S. Patent No. 5,032,666 to Hu et al. issued July 1991.
46. U.S. Patent No. 5,047,025 to Taylor et al. issued September 1991.
47. U.S. Patent No. 5,053,033 to Clarke issued October 1991.
48. U.S. Patent No. 5,057,106 to Kasevich et al. issued October 1991.
49. U.S. Patent No. 5,061,273 to Yock issued October 1991.

50. U.S. Patent No. 5,086,068 to Raleigh et al. issued February 1992.
51. U.S. Patent No. 5,087,256 to Taylor et al. issued February 1992.
52. U.S. Patent No. 5,092,841 to Spears issued March 1992.
53. U.S. Patent No. 5,100,429 to Sinofsky et al. issued March 1992.
54. U.S. Patent No. 5,102,402 to Dror et al. issued April 1992.
55. U.S. Patent No. 5,106,386 to Isner et al. issued April 1992.
56. U.S. Patent No. 5,109,859 to Jenkins issued May 1992.
57. U.S. Patent No. 5,120,322 to Davis et al. issued June 1992.
58. U.S. Patent No. 5,126,140 to Ito et al. issued June 1992.
59. U.S. Patent No. 5,156,594 to Keith issued October 1992.
60. U.S. Patent No. 5,163,898 to Morcos et al. issued November 1992.
61. U.S. Patent No. 5,171,217 to March et al. issued December 1992.
62. U.S. Patent No. 5,171,264 to Merrill issued December 1992.
63. U.S. Patent No. 5,199,951 to Spears issued April 1993.
64. U.S. Patent No. 5,207,670 to Sinofsky issued May 1993.
65. U.S. Patent No. 5,217,482 to Keith issued June 1993.
66. U.S. Patent No. 5,197,946 to Tachibana issued March 1993.
67. U.S. Patent No. 5,232,446 to Arney issued August 1993.
68. U.S. Patent No. 5,236,410 to Granov et al. issued August 1993.
69. U.S. Patent No. 5,263,992 to Guire issued November 1993.
70. U.S. Patent No. 5,282,785 to Shapland et al. issued February 1994.
71. U.S. Patent No. 5,286,254 to Shapland et al. issued February 1994.
72. U.S. Patent No. 5,304,121 to Sahatjian issued April 1994.

73. U.S. Patent No. 5,304,171 to Gregory et al. issued April 1994.
74. U.S. Patent No. 5,324,750 to Lincoln et al. issued June 1994.
75. U.S. Patent No. 5,445,608 to Chen et al. issued August 1995.
76. U.S. Patent No. 5,470,307 to Lindall issued November 1995.
77. U.S. Patent No. 5,482,719 to Guillet et al. issued January 1996.
78. U.S. Patent No. 5,509,896 to Carter issued April 1996.
79. U.S. Patent No. 5,571,151 to Gregory issued November 1996.
80. U.S. Patent No. 5,588,962 to Nicholas et al. issued December 1996.
81. U.S. Patent No. 5,612,050 to Rowe et al. issued March 1997.
82. U.S. Patent No. 5,665,077 to Rosen et al. issued September 1997.
83. U.S. Patent No. 5,695,460 to Siegel et al. issued December 1997.
84. U.S. Patent No. 5,700,243 to Narciso, Jr. issued December 1997.
85. U.S. Patent No. 5,709,676 to Alt issued January 1998.
86. U.S. Patent No. 5,749,915 to Slepian issued May 1998.
87. U.S. Patent No. 5,773,308 to Conrad et al. issued June 1998.
88. U.S. Patent No. 5,788,678 to Van Antwerp issued August 1998.
89. U.S. Patent No. 5,795,581 to Segalman et al. issued August 1998.
90. U.S. Patent No. 5,797,887 to Rosen et al. issued August 1998.
91. U.S. Patent No. 5,817,144 to Gregory issued October 1998.
92. U.S. Patent No. 5,830,539 to Yan et al. issued November 1998.
93. U.S. Patent No. 5,836,940 to Gregory issued November 1998.
94. U.S. Patent No. 5,840,059 to March et al. issued November 1998.
95. U.S. Patent No. 5,843,073 to Sinofsky issued December 1998.

96. U.S. Patent No. 5,843,789 to Nomura et al. issued December 1998.
97. U.S. Patent No. 5,845,640 to Lawandy issued December 1998.
98. U.S. Patent No. 5,868,720 to Van Antwerp issued February 1999.
99. U.S. Patent No. 5,925,012 to Murphy-Chutorian et al. issued July 1999.
100. U.S. Patent No. 5,938,595 to Glass et al. issued August 1999.
101. U.S. Patent No. 5,941,845 to Tu et al. issued August 1999.
102. U.S. Patent No. 5,947,977 to Slepian et al. issued September 1999.
103. U.S. Patent No. 5,954,706 to Sahatjian issued September 1999.
104. U.S. Patent No. 5,991,650 to Swanson et al. issued November 1999.
105. U.S. Patent No. 6,086,558 to Bower et al. issued July 2000.
106. U.S. Patent No. 6,228,393 to DiCosmo et al. issued May 2001.
107. Voss, Richard F., *Fractals in nature: From characterization to simulation*, The Science of Fractional Images, (1988) Chapter 1, pp. 39-70, Springer-Verlag, New York.

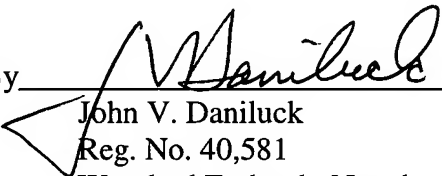
The referenced listed were previously cited in and submitted to the PTO in U.S. Patent Application Serial No. 09/692,857, filed October 20, 2000, to which the present application claims priority under 35 U.S.C. § 120 and in accordance with 37 C.F.R. § 1.98(d), copies have not been provided. However, if requested, Applicant will provide copies of the references if this will expedite examination of this application.

The filing of this Information Disclosure Statement shall not be construed as an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56.

This Statement is being submitted prior to the mailing of any Office Action on the merits. It is believed that no fee is required for consideration of the submitted items.

Should any fee be required, however, please charge such fee to Deposit Account No. 34-3030, but not to include any payment of issue fees.

Respectfully submitted,

By   
John V. Daniluck  
Reg. No. 40,581  
Woodard Emhardt, Naughton,  
Moriarty & McNett  
Bank One Center/Tower  
111 Monument Circle, Suite 3700  
Indianapolis, Indiana 46204-5137  
(317) 634-3456





INFORMATION DISCLOSURE  
CITATION  
(Use several sheets if necessary)

Page 1 of 7

ATTY. DOCKET NO.  
3413-12

SERIAL NO.  
10/039,797

APPLICANT  
Eldon H. Nyhart, Jr.

FILING DATE  
October 26, 2001

GROUP  
Unassigned

### U.S. PATENT DOCUMENTS

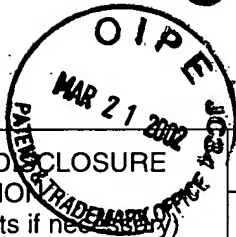
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	2,883,986	April 1959	De Luca et al.			
	3,435,826	April 1969	Fogarty			
	3,467,101	Sept. 1969	Fogarty et al.			
	3,570,476	March 1971	Gregg			
	3,901,829	August 1975	Slingluff et al.			
	4,062,746	Dec. 1977	Rich et al.			
	4,156,066	May 1979	Gould			
	4,156,067	May 1979	Gould			
	4,195,637	April 1980	Gruntzig et al.			
	4,271,839	June 1981	Fogarty et al.			
	4,289,128	Sept. 1981	Rusch			
	4,323,071	April 1982	Simpson et al.			
	4,359,453	Nov. 1982	Gordon			
	4,479,497	Oct. 1984	Fogarty et al.			
	4,531,943	July 1985	Van Tassel et al.			
	4,545,390	Oct. 1985	Leary			
	4,554,929	Nov. 1985	Samson et al.			
	4,571,240	Feb. 1986	Samson et al.			

RECEIVED  
MAR 25 2002  
TO 3700 MAIL ROOM

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE  
CITATION

(Use several sheets if necessary)

Page 2 of 7

ATTY. DOCKET NO.  
3413-12

SERIAL NO.  
10/039,797

APPLICANT  
Eldon H. Nyhart, Jr.

FILING DATE  
October 26, 2001

GROUP  
Unassigned

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	4,573,966	March 1986	Weigl et al.			
	4,581,017	April 1986	Sahota			
	4,582,181	April 1986	Samson			
	4,597,755	July 1986	Samson et al.			
	4,610,241	Sept. 1986	Gordon			
	4,616,648	Oct. 1986	Simpson			
	4,702,252	Oct. 1987	Brooks et al.			
	4,743,673	May 1988	Johnston et al.			
	4,748,982	June 1988	Horzewski et al.			
	4,762,129	Aug. 1988	Bonzel			
	4,771,130	Sept. 1988	Cohen			
	4,799,479	Jan. 1989	Spears			
	4,807,620	Feb. 1989	Strul et al.			
	4,824,436	April 1989	Wolinsky			
	4,835,258	May 1989	Hollenberg et al.			
	4,846,171	July 1989	Kauphusman et al.			
	4,878,492	Nov. 1989	Sinofsky et al.			
	4,895,560	Jan. 1990	Papantonakos			

RECEIVED  
MAR 26 2002  
TC 3700 MAIL ROOM

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)  Page 3 of 7	ATTY. DOCKET NO. 3413-12	SERIAL NO. 10/039,797
	APPLICANT Eldon H. Nyhart, Jr.	
	FILING DATE October 26, 2001	GROUP Unassigned

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	4,940,055	July 1990	Brown		TC 37403408	
	4,957,481	Sept. 1990	Gatenby		TC 37403408	
	4,976,690	Dec. 1990	Solar et al.		TC 37403408	
	4,994,033	Feb. 1991	Shockey et al.		TC 37403408	
	4,977,431	March 1991	Isner et al.		TC 37403408	
	5,002,531	March 1991	Bonzel		TC 37403408	
	5,009,659	April 1991	Hamlin et al.		TC 37403408	
	5,026,367	June 1991	Leckrone et al.		TC 37403408	
	5,032,666	July 1991	Hu et al.		TC 37403408	
	5,047,025	Sept. 1991	Taylor et al.		TC 37403408	
	5,053,033	Oct. 1991	Clarke		TC 37403408	
	5,057,106	Oct. 1991	Kasevich et al.		TC 37403408	
	5,061,273	Oct. 1991	Yock		TC 37403408	
	5,086,068	Feb. 1992	Raleigh et al.		TC 37403408	
	5,087,256	Feb. 1992	Taylor et al.		TC 37403408	
	5,092,841	Mar. 1992	Spears		TC 37403408	
	5,100,429	Mar. 1992	Sinofsky et al.		TC 37403408	
	5,102,402	April 1992	Dror et al.		TC 37403408	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)  Page 4 of 7	ATTY. DOCKET NO. 3413-12	SERIAL NO. 10/039,797
	APPLICANT Eldon H. Nyhart, Jr.	
	FILING DATE October 26, 2001	GROUP Unassigned

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	5,106,386	April 1992	Isner et al.			
	5,109,859	May 1992	Jenkins			
	5,120,322	June 1992	Davis et al.			
	5,126,140	June 1992	Ito et al.			
	5,156,594	Oct. 1992	Keith			
	5,163,898	Nov. 1992	Morcos et al.			
	5,171,217	Dec. 1992	March et al.			
	5,171,264	Dec. 1992	Merrill			
	5,199,951	April 1993	Spears			
	5,207,670	May 1993	Sinofsky			
	5,217,482	June 1993	Keith			
	5,197,946	Mar. 1993	Tachibana			
	5,232,446	Aug. 1993	Arney			
	5,236,410	Aug. 1993	Granov et al.			
	5,263,992	Nov. 1993	Guire			
	5,282,785	Feb. 1994	Shapland et al.			

EXAMINER	DATE CONSIDERED
<p><b>*EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	



INFORMATION DISCLOSURE  
CITATIONS  
(Use several sheets if necessary)

Page 6 of 7

ATTY. DOCKET NO.  
3413-12

SERIAL NO.  
10/039,797

APPLICANT  
Eldon H. Nyhart, Jr.

FILING DATE  
October 26, 2001

GROUP  
Unassigned

### U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	5,795,581	Aug. 1998	Segalman et al.			
	5,797,887	Aug. 1998	Rosen et al.			
	5,817,144	Oct. 1998	Gregory			
	5,830,539	Nov. 1998	Yan et al.			
	5,836,940	Nov. 1998	Gregory			
	5,840,059	Nov. 1998	March et al.			
	5,843,073	Dec. 1998	Sinofsky			
	5,843,789	Dec. 1998	Nomura et al.			
	5,845,640	Dec. 1998	Lawandy			
	5,868,720	Feb. 1999	Van Antwerp			
	5,925,012	July 1999	Murphy-Chutorian et al.			
	5,938,595	Aug. 1999	Glass et al.			
	5,941,845	Aug. 1999	Tu et al.			
	5,947,977	Sept. 1999	Slepian et al.			
	5,954,706	Sept. 1999	Sahatjian			
	5,991,650	Nov. 1999	Swanson et al.			
	6,086,558	July 2000	Bower et al.			
	6,228,393	May 2001	DiCosmo et al.			

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

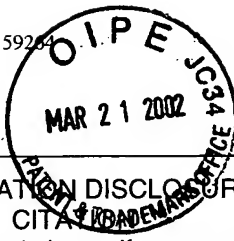


INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)  Page 5 of 7	ATTY. DOCKET NO. 3413-12	SERIAL NO. 10/039,797
	APPLICANT Eldon H. Nyhart, Jr.	
	FILING DATE October 26, 2001	GROUP Unassigned

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	5,286,254	Feb. 1994	Shapland et al.			
	5,304,121	April 1994	Sahatjian			
	5,304,171	April 1994	Gregory et al.			
	5,324,750	June 1994	Lincoln et al.			
	5,445,608	Aug. 1995	Chen et al.			
	5,470,307	Nov. 1995	Lindall			
	5,482,719	Jan. 1996	Guillet et al.			
	5,509,896	April 1996	Carter			
	5,571,151	Nov. 1996	Gregory			
	5,588,962	Dec. 1996	Nicholas et al.			
	5,612,050	March 1997	Rowe et al.			
	5,665,077	Sept. 1997	Rosen et al.			
	5,695,460	Dec. 1997	Siegel et al.			
	5,700,243	Dec. 1997	Narciso, Jr.			
	5,709,676	Jan. 1998	Alt			
	5,749,915	May 1998	Slepian			
	5,773,308	June 1998	Conrad et al.			
	5,788,678	Aug. 1998	Van Antwerp			

EXAMINER	DATE CONSIDERED
<p><b>*EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	



INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)  Page 7 of 7	ATTY. DOCKET NO. 3413-12	SERIAL NO. 10/039,797
	APPLICANT Eldon H. Nyhart, Jr.	
	FILING DATE October 26, 2001	GROUP Unassigned

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Publisher, city and/or country where published	T
	B1	VOSS, RICHARD F., <i>Fractals in nature: From characterization to simulation</i> , The Science of Fractional Images, (1988) Chapter 1, pp. 39-70, Springer-Verlag, New York	Y
Examiner Signature		Date Considered	

\*Examiner: initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.